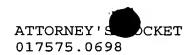
5

10

15





26

DETECTING INFRARED RADIATION

ABSTRACT OF THE DISCLOSURE

According to one embodiment, detecting radiation includes receiving a first laser drive field at a cell comprising a medium having a number of states. The first laser drive field has а frequency approximately equivalent to a transition frequency between a first state and a second state. A second laser drive field frequency approximately equivalent transition frequency between the first state and a third state, and an infrared field having a frequency approximately equivalent to a transition frequency between the third state and a fourth state are received. The medium has a transition between the second state and third state substantially forbidden to optimal coherence on the transition between the second state and the third state. The infrared upconverted to generate a detectable field having a approximately equivalent to a transition frequency between the second state and the fourth state.

20 DAL01:634796.1